



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,606	01/18/2005	Safah Bouzar	0687-1001	4929
<div>466 7590 10/18/2010</div> <div>YOUNG &amp; THOMPSON</div> <div>209 Madison Street</div> <div>Suite 500</div> <div>Alexandria, VA 22314</div>				
EXAMINER				
ALLISON, ANDRAE S				
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
10/18/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

### Office Action Summary

**Application No.**

10/521,606

**Applicant(s)**

BOUZAR, SALAH

**Examiner**

ANDRAE S. ALLISON

**Art Unit**

2624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed 07/30/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-22 and 27-32 is/are rejected.
- 7) ☒ Claim(s) 23-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Remarks***

1. The Office Action has been made issued in response to amendment filed July 30, 2010. Claims 15-32 are pending. Applicant's arguments have been carefully and respectfully considered in light of the instant amendment, and are not persuasive. Accordingly, this action has been made FINAL.

### Claim Rejections – 35 USC section § 103

On page 12 of the response, Applicant argue that Tanaka fails to discloses "having said programmable processing member determine that said video camera is substantially stationary in relation to said scene"; however, the respectfully disagrees. In column 5, lines 20-37, Tanaka describes the processing for determining if a camera has stop panning in which the different between two sharpness signals is determined and compared to a threshold. Thus Tanaka clearly discloses "having said programmable processing member determine that said video camera is substantially stationary in relation to said scene". Further on page 12, Applicant argues that Tanaka does not "disclose in any manner detecting stationarity of a camera by comparing points in a scene with their image in a plane of the camera. However, this limitation is not recited in the rejected claims. Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 32 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 32 recite "wherein the programmed processor detecting the roadside incident ends processing upon determination that the camera is moving relative to a scene, the determination of camera movement based upon changing points in a current live image relative to a set of stored images, the programmed processor detecting the roadside incident begins processing upon determination that the camera is stationary relative to the scene, the determination of camera movement based upon points remaining fixed in the current live image relative to the set of stored images", however, the above mention limitation is neither disclosed nor described in the specification. The closest disclosure in the specification can be found on page 5 of the filed specification which describes comparing two sets of points, one set in the current image and the set in a first image. There is not description of comparing a current image with a set of stored images. Therefore, one of ordinary skill in the art would not be able to practice the present invention without burden and undue experimentation.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-21, 27 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liam (WO 01/33503) in view of Tanaka (US Patent No.: 5,798,793) further in view of Bague (US Patent No.: 6,246,933).

As to independent claims 17 and 31, Liam discloses a method of detecting an incident on a portion of route (1) situated in a scene (2) (method for detecting traffic incident, column 1, lines 7-10) when said portion of route is suitable for having objects traveling therealong (detection of vehicle of region of interest (ROI) at traffic sites, column 11, lines 1-7), and when the method makes use of a video camera (3) (1301, see Fig 1) having a target (4) constituting an optoelectronic converter of a real optical image of the scene, said target being controlled by a programmable processor member (6) (image processing unit, see Fig 1), said process for detecting incidents comprising determining in said video camera at least one point selected on a current real image of said scene, outside of said portion of said route, which is approximately at the same position on at least one of a set of immediate previous targets; if not so, coming back to step i); if so, moving to step B) B) having said programmable processor member

process said current real images to detect incidents (see page 19, section 5.2.5 and Fig 27 - where a loop is used to detect an incident on chevron (outside of route) or roadway).

However, Liam does not teach video camera controllable in one of azimuth, elevation and field of view and having said programmable processing member determine that said video camera is substantially stationary in relation to said scene. Tanaka discloses a method for using an automatic focusing device (see column 1, lines 11-14) which includes a video camera (see Fig 1) controllable in one of azimuth, elevation and field of view (see column 3, lines 10-33) and having said programmable processing member (18 –see Fig 1) determine that said video camera is substantially stationary in relation to said scene (see column 4, lines 39-45 and Fig 2 – where a determination is made as to when the camera has stop panning). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to consider the teaching of Tanaka as a modification to the teaching of Liam in order to provide an automatic focus adjusting device in which no erroneous operation is present by exactly discriminating a change in a focus signal caused by a relative movement between an object and a camera from a change in an in-focus state (see column 2, lines 1-80).

Note the discussion above, the combination Liam and Tanaka as a whole does not expressly disclose an optoelectronic converter of a real optical image of the scene. Bague discloses a method for traffic accident data recording wherein an optoelectronic converter of a real optical image of the scene (see column 14, lines 30-31). At the time

of the invention, it would have been obvious to a person of ordinary skill in the art to modified the method for detecting a traffic incident of Liam as modified by Tanka for reproducing and reconstructing accident by using traffic information stored in a traffic accident data recorder (column 1, lines 7-14) so that a traffic incident could be reconstructed using real historic data instead of post-accident or estimated data (column 6, lines 5-8).

As to claim 15-16, all the limitations are discussed above except: wherein the real image of the scene begins to move relative to the target occurs upon the beginning of a zooming in function or a zooming out function of the real image and wherein the end of the movement of the real image of the scene relative to the target occurs upon an end of a zooming in function or a zooming out function of the real image. However, it would have obvious for one skilled in the art to have modified Liam as modified by Bague to wherein the end and beginning of the scene is a function of the zoom so that the camera would be in optimal position and have the proper focus to capture a scene and to quickly and easily determine if there an incident has occurred.

As to claim 18, Liam teaches the method, wherein the programmable processor member is deactivated as soon as the stationarity of the scene relative to the target is detected as ending, and reactivated, in order to implement the process for detecting an incident, as soon as said stationarity of the scene relative to the target is detected as beginning. (note that the vehicle detection window detect the moving vehicle and if the

vehicle is not present in the preceding and current frame the vehicle detection window will be in an idle state, see column 21, lines 9-15, also see column 23, lines 1-15, where a stopped vehicle is detected indication a traffic incident).

As to claim 19, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least one first image point of said real image of the scene corresponding to a fixed point of said scene; by generating a first command signal when said first image point is subjected to a change of position on said target; and in controlling said programmable processor member as a function of said first command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

As to claim 20, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least second and third image points of said real image of the scene corresponding respectively to two stationary points of said scene; by generating a second command signal when the distance between said second and third image points changes; and by controlling said programmable processor member as a function of the second command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).



As to claim 21, Liam teaches the method, characterized in that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining at least fourth and fifth image points of said real image of the scene which correspond respectively to two stationary points of said scene; by generating a third command signal when the distance between the fourth and fifth image points varies and when at least one of the fourth and fifth image points is subject to a change of position on said target; and by controlling said programmable processor member as a function of the third command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

As to claim 27, Liam teaches the method characterized by the fact that the beginning and the end of movement of the real image of the scene relative to the target are detected: by determining a plurality of image points of said real image of the scene corresponding to a plurality of points that are stationary at the beginning of movement of the real image; by generating a fourth command signal when a determined number of said plurality of image points have become stationary again at the end of movement of the real image; and by controlling said programmable processor member as a function of said fourth command signal (see column 19, lines 14-30, where textual measurement for the region of interest is computed using matrix elements).

(As best understood) As to claim 32, all the limitations are described above except: "wherein the programmed processor detecting the roadside incident ends

processing upon determination that the camera is moving relative to a scene, the determination of camera movement based upon changing points in a current live image relative to a set of stored images, the programmed processor detecting the roadside incident begins processing upon determination that the camera is stationary relative to the scene, the determination of camera movement based upon points remaining fixed in the current live image relative to the set of stored images". Tanaka discloses wherein the programmed processor detecting the roadside incident ends processing upon determination that the camera is moving relative to a scene, the determination of camera movement based upon changing points in a current live image relative to a set of stored images, the programmed processor detecting the roadside incident begins processing upon determination that the camera is stationary relative to the scene, the determination of camera movement based upon points remaining fixed in the current live image relative to the set of stored images (see column 5).

6. Claims 22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liam (PCT/SG99/00115) in view of Tanaka (US Patent No.: 5,798,793) and Bague (US Patent No.: 6,246,933) as applied to claim 17 above, and further in view of Michalopoulos et al (Patent No.: US 4,847,772).

As to claim 22, the combination Liam, Tanaka and Bague as a whole does not teach the method, characterized by the fact that it consists in subdividing said target into a plurality of photosensitive points, said photosensitive points being suitable for delivering signals as a function of the quantity of radiation received by their

photosensitive surfaces. Michalopoulos discloses a vehicle detection method (column 1, lines 8-10) characterized by the fact that it consists in subdividing said target into a plurality of photosensitive points, said photosensitive points being suitable for delivering signals as a function of the quantity of radiation received by their photosensitive surfaces (see Fig 3, where the image is divided into blocks, also see column 2, lines 55-65). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modified the method for detecting a traffic incident of Liam as modified by Tanaka and Bague with the vehicle detection method of Michalopoulos to determine vehicle presence, passage, measure various traffic parameters, thus facilitating traffic surveillance (column 1, lines 10-17) by processing selection portion of the successive frames (column 4, lines 30-35).

As to claims 28-30, note the discussion of claim 22 above.

***Allowable Subject Matter***

7. Claims 23-26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: None of the prior art teaches or fairly disclose "wherein the process for detecting an incident on said portion of route when it is suitable for having objects traveling thereon along an axis and following a path that is substantially imposed, comprises: in selecting a group of

photosensitive points in said plurality of photosensitive points of the target, the selected group of points corresponding to points of said portion of route located on a plurality of main geometrical construction lines, said main construction lines being situated in the plane of said portion of route and all being substantially parallel to the axis of said trajectory; and in analyzing the set of signals delivered by the photosensitive points of said selected group".

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDRAE S. ALLISON whose telephone number is

(571)270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vu Le/  
Supervisory Patent Examiner, Art Unit 2624

/A. S. A./  
Examiner, Art Unit 2624